FIG.1

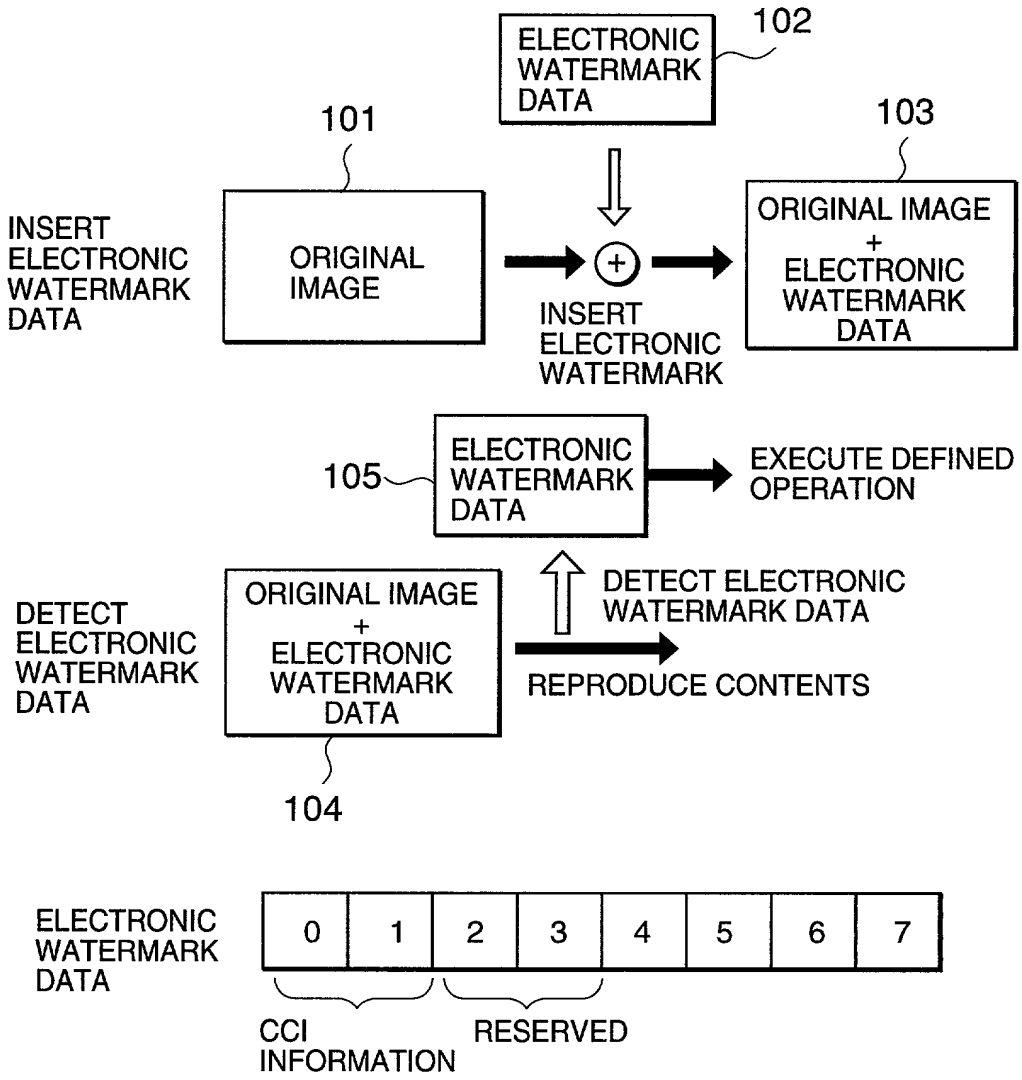

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FIG.2

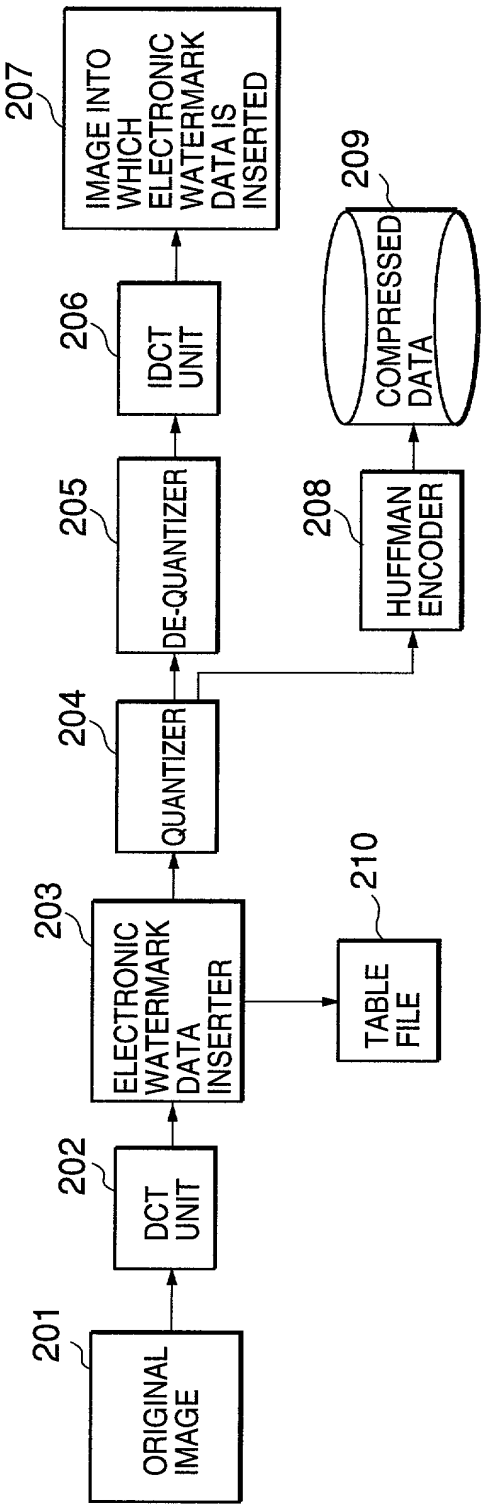

201
ORIGINAL IMAGE
202
DCT UNIT
203
ELECTRONIC WATERMARK DATA INSERTER
204
QUANTIZER
205
DE-QUANTIZER
206
IDCT UNIT
207
IMAGE INTO WHICH ELECTRONIC WATERMARK DATA IS INSERTED
208
HUFFMAN ENCODER
209
COMPRESSED DATA
210
TABLE FILE

FIG.3

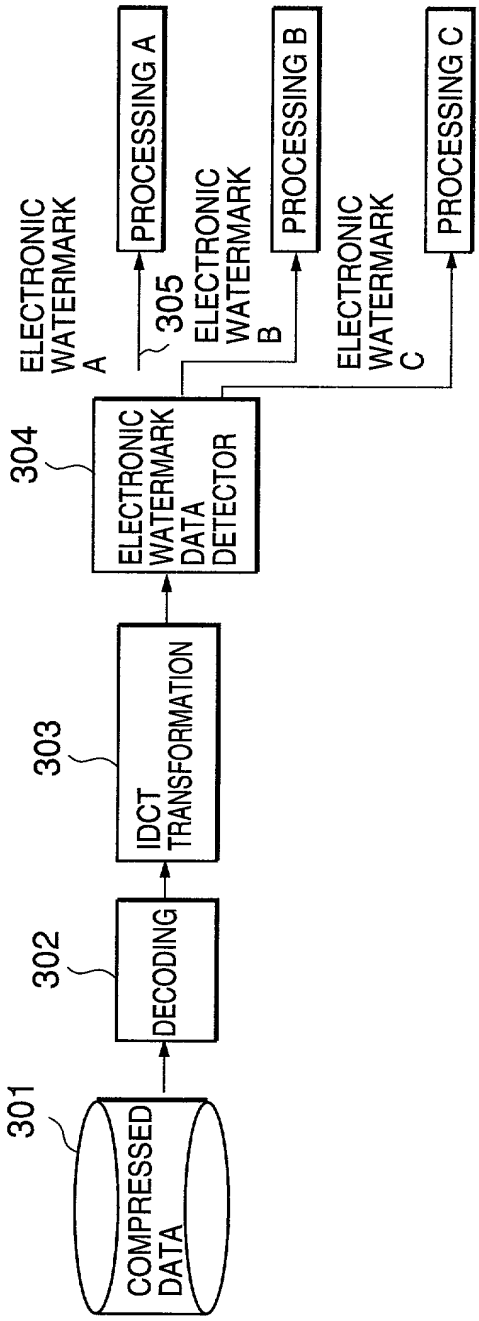

301
COMPRESSED DATA
302
DECODING
303
IDCT TRANSFORMATION
304
ELECTRONIC WATERMARK DATA DETECTOR
305
ELECTRONIC WATERMARK A
ELECTRONIC WATERMARK B
ELECTRONIC WATERMARK C
PROCESSING A
PROCESSING B
PROCESSING C

FIG.4

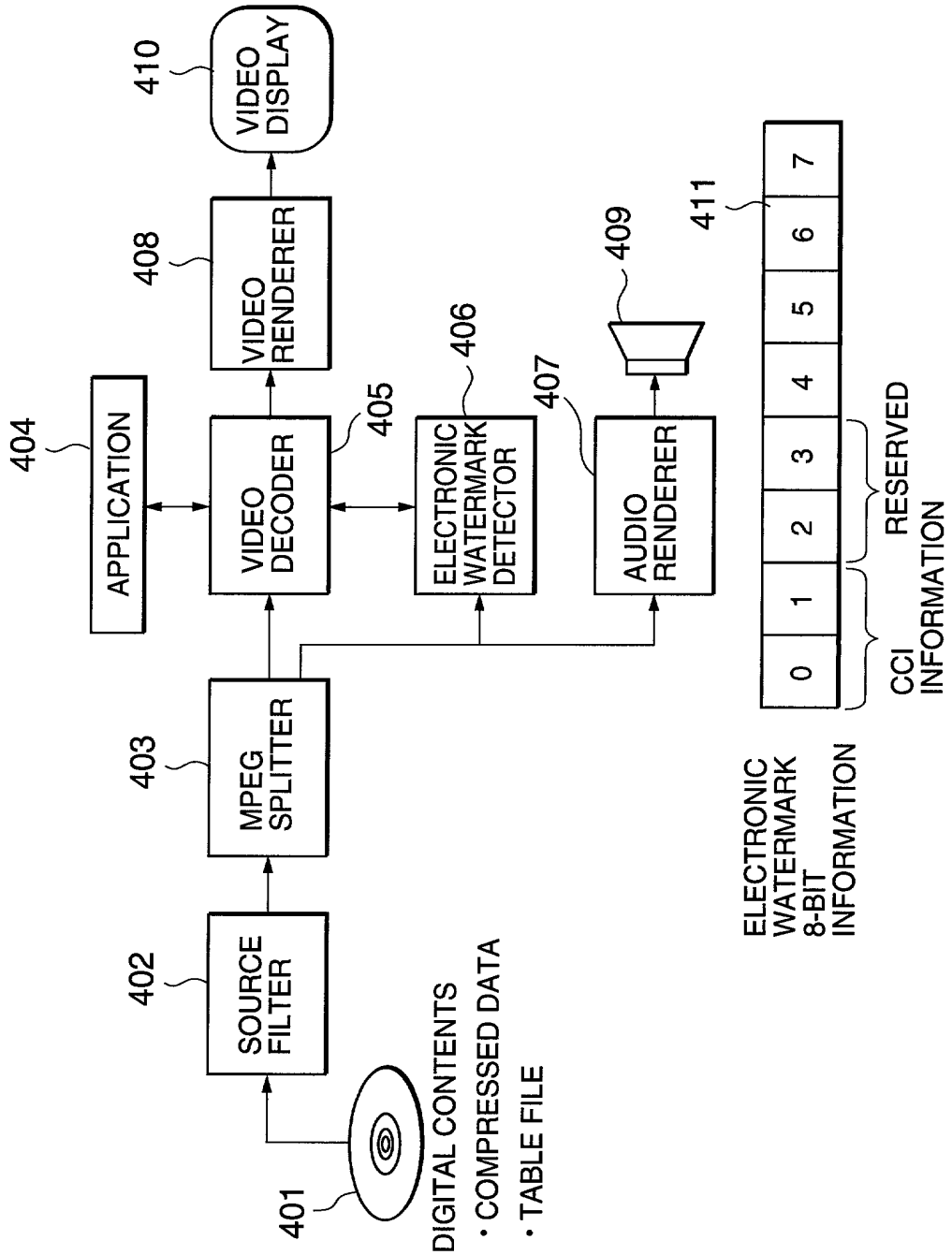
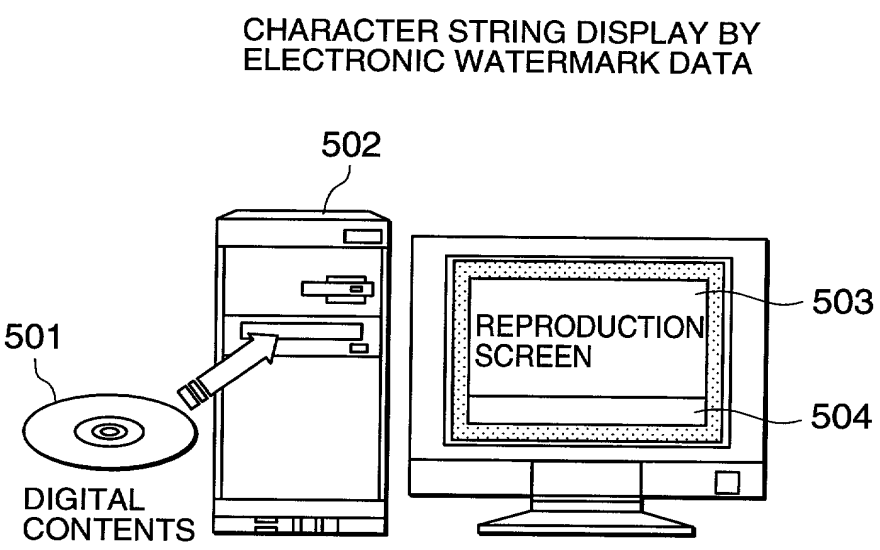

401
DIGITAL CONTENTS
• COMPRESSED DATA
• TABLE FILE
402
SOURCE FILTER
403
MPEG SPLITTER
404
APPLICATION
405
VIDEO DECODER
406
ELECTRONIC WATERMARK DETECTOR
407
AUDIO RENDERER
408
VIDEO RENDERER
409
410
VIDEO DISPLAY
411
ELECTRONIC WATERMARK 8-BIT INFORMATION
0
1
2
3
4
5
6
7
CCI INFORMATION
RESERVED

FIG.5

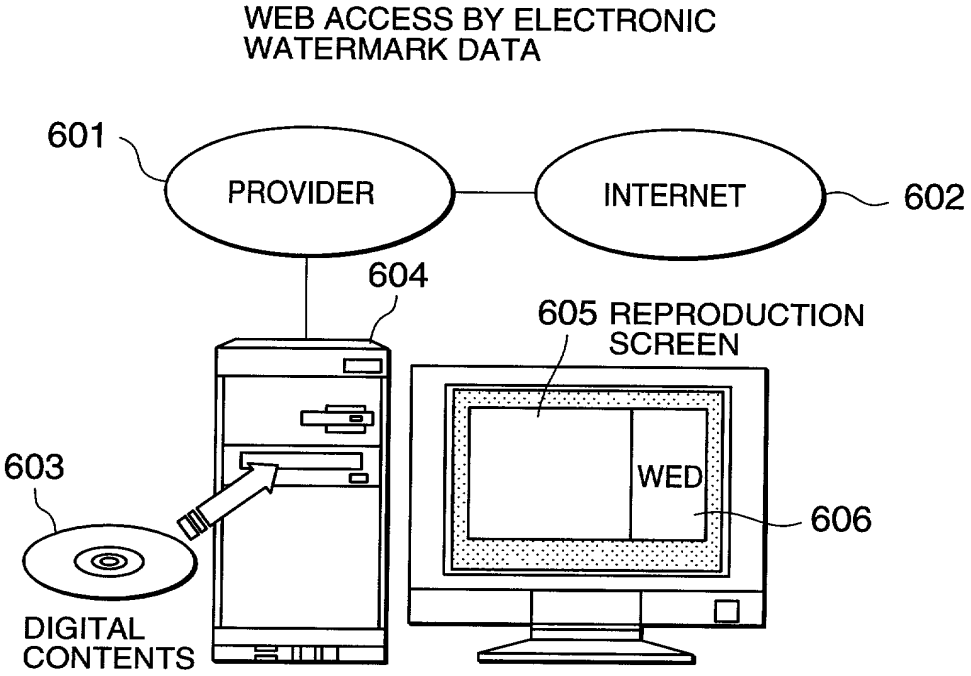


DEFINITION IN TABLE FILE

505

LOW-ORDER 4 BITS	DISPLAY CONTENTS
0000	DO NOT DISPLAY
0001	DISPLAY ADVERTISEMENT OF COMPANY A.
0010	DISPLAY ADVERTISEMENT OF COMPANY B.
⋮	⋮

FIG.6

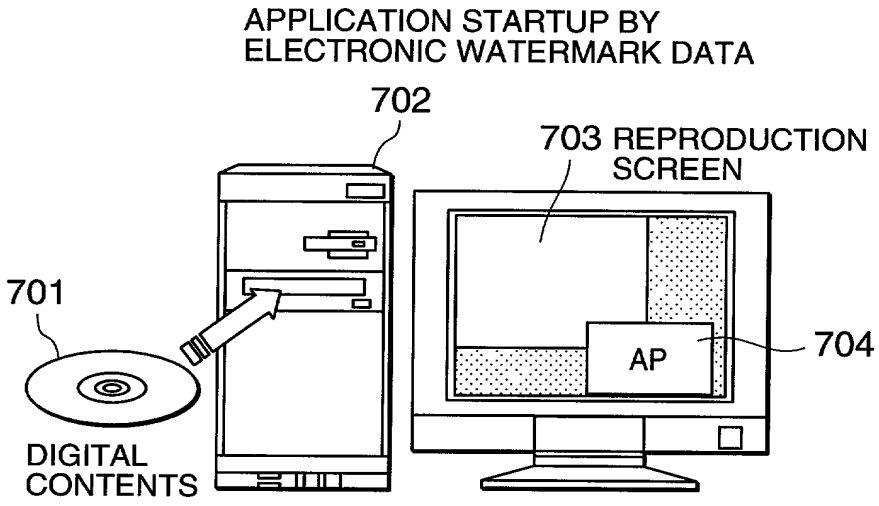


DEFINITION IN TABLE FILE

607

LOW-ORDER 4 BITS	DISPLAY CONTENTS
0000	DO NOT DISPLAY
0001	ACCESS http://abc
0010	ACCESS http://def
⋮	⋮

FIG.7



DEFINITION IN TABLE FILE

705

LOW-ORDER 4 BITS	DISPLAY CONTENTS
0000	DO NOT DISPLAY
0001	START APPLICATION A
0010	START APPLICATION B
⋮	⋮

FIG.8

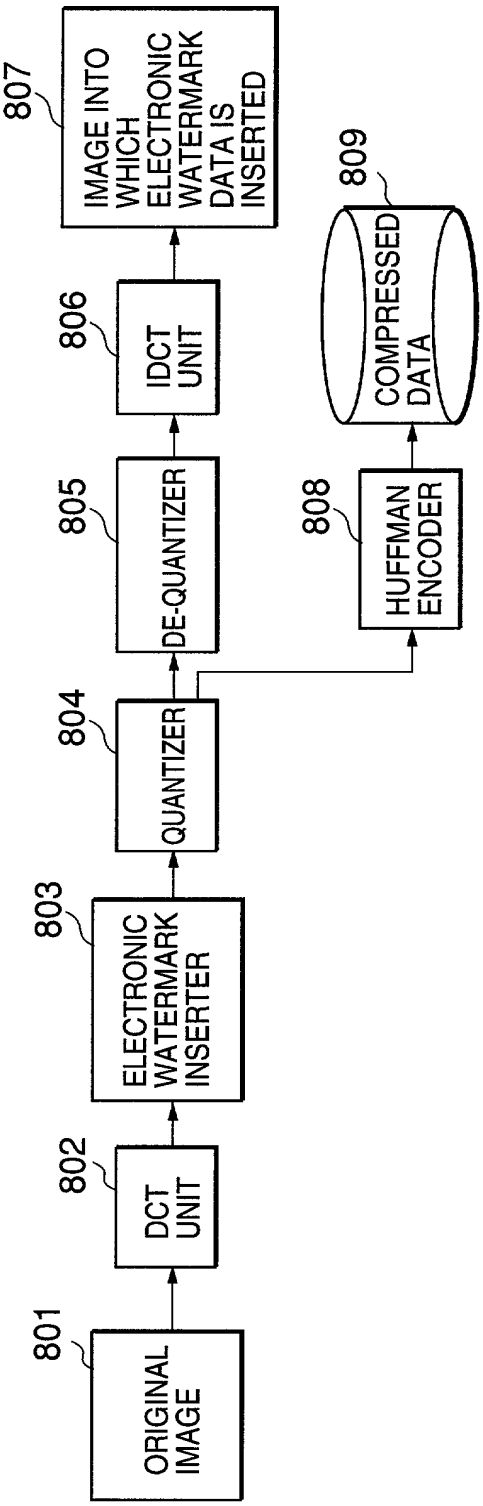

801
ORIGINAL IMAGE
802
DCT UNIT
803
ELECTRONIC WATERMARK INSERTER
804
QUANTIZER
805
DE-QUANTIZER
806
IDCT UNIT
807
IMAGE INTO WHICH ELECTRONIC WATERMARK DATA IS INSERTED
808
HUFFMAN ENCODER
809
COMPRESSED DATA

FIG.9

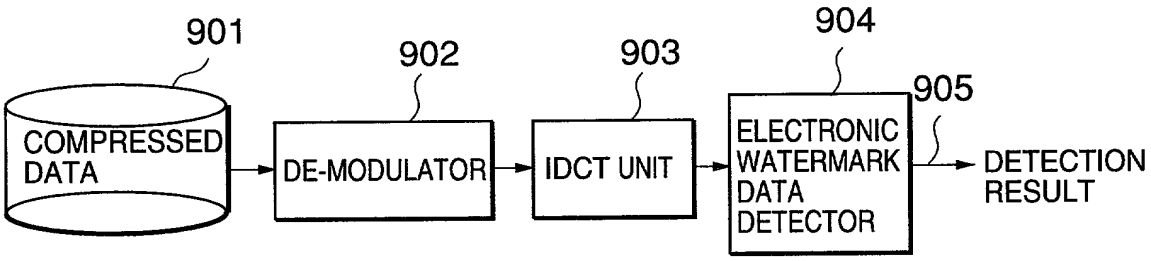
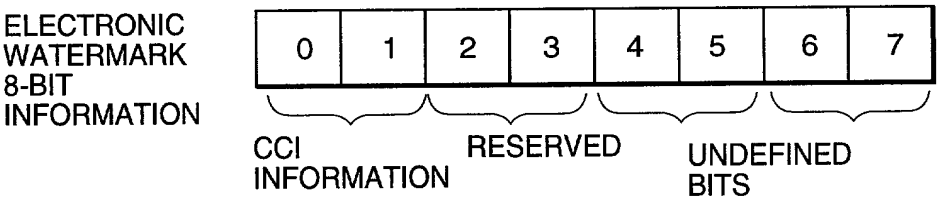

901
902
903
904
905
COMPRESSED DATA
DE-MODULATOR
IDCT UNIT
ELECTRONIC WATERMARK DATA DETECTOR
DETECTION RESULT

FIG.10


ELECTRONIC WATERMARK 8-BIT INFORMATION
0
1
2
3
4
5
6
7
CCI INFORMATION
RESERVED
UNDEFINED BITS